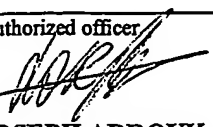


INTERNATIONAL SEARCH REPORT

International application No.

PCT/NZ03/00174

A. CLASSIFICATION OF SUBJECT MATTER		
Int. Cl. ⁷ : G01C 21/20, G01C 15/00, G06K 9/00, G03B 15/00, G08C 17/02, G05B 23/02, G01P 13/00		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols)		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WPAT: camera, image, picture, map; distance, orientation, spatial, GPS, surveying; store, memory, pointer, indicator, reference, associate; address; information, data; mobile, portable; spatial, distance; sensor; port, connect;		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6173239 B1 (ELLENBY), 9 January 2001 Whole document	1 - 28
A	WO 96/03715 A1 (MONASH UNIVERSITY), 8 February 1996 Whole document	1 - 28
X	DE 19913841 A1 (KLEIN, HANSJORG; THOMA, FRIEDRICH), 28 September 2000 Whole Document	29 - 37
X	EP 377480 B1 (TELEATLAS INTERNATIONAL B.V.), 8 December 1993 Page 3, line 31 - page 5, line 9; All claims; Figs 1 - 3.	29 - 37
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex		
<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p>		
Date of the actual completion of the international search 20 November 2003		Date of mailing of the international search report 28 NOV 2003
Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929		Authorized officer  JOSEPH ARROUK Telephone No : (02) 6283 2219

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	WO 02/065786 A1 (LEE KUJIN; KWEON INSO; KIM HOWON; KIM JUNSIK), 22 August 2002 Abstract; Page 3, lines 5 - 11; Page 4, line 10 - page 6, line 11; Claims 1 and 11; Fig 1	29 - 37
A	US 6252544 B1 (HOFFBERG), 26 June 2001 Whole document	38 - 47
A	US 5764785 A (JONES ET AL), 9 June 1998 Whole document	38 - 47
A	EP 358628 A2 (TRANSITIONS RESEARCH CORPORATION), 14 March 1990 Whole document	38 - 47
X	WO 00/26846 A1 (CROSSLING, DUDLEY, BRYAN), 11 May 2000 Whole document	48 - 60
X	US 5473403 A (SUDA ET AL), 5 December 1995 Abstract; Column 2, lines 21 - 54; Column 3, line 54 - column 4, line 59; Figs 1A and 1B; All claims	48 - 60
P, X	US 2002/171742 A1 (ITO ET AL), 21 November 2002 Whole document	48 - 60
A	US 2002/0103417 A1 (GAZDZINSKI), 1 August 2002 Whole document	61 - 68
A	US 6382198 B1 (SMITH ET AL), 7 May 2002 Whole document	61 - 68
X	US 4099221 A (CARRILLO), 4 July 1978 Whole document	69 - 78
A	US 5659804 A (KELLER), 19 August 1997 Whole document	69 - 78

Box I Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos :
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos :
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos :
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

Box II Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

The international application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept. In coming to this conclusion the International Search Authority has found that there are six inventions.

See supplemental Box. Continuation of Box II.

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

Continuation of Box No: II

The international application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept. In coming to this conclusion the International Search Authority has found that there are six inventions:

1. Claims 1 - 28 are primarily directed at a method of processing, storing and transferring information in a mobile instrument. The information including a first information file containing metadata and a pointer indicative of a first auxiliary file address. The auxiliary file containing image information. It is considered that storing an image in one file and storing a pointer to reference that image in a separate file comprises a first "special technical feature".
2. Claims 29 - 37 primarily define a mobile instrument including a camera, one or more spatial sensors, and a port able to be connected to an external sensor from which the instrument may obtain further information. It is considered that obtaining further information from a port connected to an external sensor comprises a second "special technical feature".
3. Claims 38 - 47 are primarily directed at a method of operating a mobile instrument including two or more measuring devices. The measuring devices including a camera and one or more spatial sensors. The method including asynchronously controlling the power supply of power to at least two of the measuring devices or power switches of the measuring devices. It is considered that asynchronously controlling the power supply of at least two measuring devices in a mobile instrument comprises a third "special technical feature".
4. Claims 48 - 60 primarily define a viewing device for providing an image of a field of view, the device including a marker module configured to superimpose a marker on the image. It is considered that a viewing device including a marker module that superimposes a marker on an image comprises a fourth "special technical feature".
5. Claims 61 - 68 are primarily directed at an instrument including two or more sensors, two or more identical generic parsers, and two or more description files. The description files containing description data describing an associated sensor. Each generic parser receives sensor information and description data, parses the sensor information in accordance with the description data, and outputs the parsed sensor information. It is considered that outputting parsed information in accordance with sensor information and description data comprises a fifth "special technical feature".
6. Finally, claims 69 - 78 primarily define a mobile instrument including a camera, a distance meter, a mirror, and adjustment means enabling a user to pivotally move the mirror to alter the aim angle of the camera and the distance meter from the instrument together, without moving the body of the instrument. It is considered that adjusting a mirror to alter the aim of a camera and a distance meter on a mobile instrument comprises a sixth "special technical feature".

Since the above-mentioned groups of claims do not share either of the technical features identified, a "technical relationship" between the inventions, as defined in PCT rule 13.2 does not exist. Accordingly the international application does not relate to one invention or to a single inventive concept.

The international Search Authority has performed six separate searches: A search for the invention defined in claims 1 - 28, a search for the invention defined in claims 29 - 37, a search for the invention defined in claims 38 - 47, search for the invention defined in claims 48 - 60, search for the invention defined in claims 61 - 68 and a search for the invention defined in claims 69 - 78. This International Search Report covers all six inventions.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/NZ03/00174

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member			
US	6173239				
WO	9603715	AU	29723/95	US	5841439
DE	19913841		NONE		
EP	0377480	JP	3001300		
WO	02065786		NONE		
US	6252544	US	6429812		
US	5764785	AU	78253/98	US	6301371
				WO	9918423
EP	0358628	JP	2170205	US	4954962
				US	5040116
WO	0026846	AU	10566/00	EP	1125244
US	5473403	JP	5323182		
US	2002171742	JP	2002359766		
US	2002103417	US	2001051766		
US	6382198		NONE		
US	4099221		NONE		
US	5659804	US	5758199	US	5950018
		WO	0058787	US	6192196
END OF ANNEX					